

March 3, 2003

Dan Shirley
Central Indiana Crematory
9606 East Washington Street
Indianapolis, Indiana
46229

Dear Mr. Shirley:

Re: Exempt Construction and Operation Status,
097-15888-00436

The application from Central Indiana Crematory, received on February 10, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following operation of cremation of human remains, to be located at 3333 East Thompson Road, Indianapolis, Indiana 46229, is classified as exempt from air pollution permit requirements:

One (1) crematory, identified as emissions unit E1, with a maximum operating capacity of 150 pounds per hour (lbs/hr).

The following conditions shall be applicable:

- (a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (b) Pursuant to 326 IAC 4-2-2 (Incinerators: requirements), the crematory shall:
 - (1) Consist of primary and secondary chambers or the equivalent.
 - (2) Be equipped with a primary burner.
 - (3) Comply with 326 IAC 5-1 and 326 IAC 2.
 - (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan approved by the Commissioner.
 - (5) Not emit particulate matter in excess of five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air.
 - (6) If any of the above requirements (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

- (7) The incinerator is exempt from requirement (a)(5) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P*, State Implementation Plan for Indiana.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the OES and IDEM, Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions, please feel free to contact Angelique Oliger at 327-2846 or aoliger@indygov.org.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez, Administrator

aco

cc: Files
Air Compliance, Matt Mosier
IDEM, Mindy Hahn
Permits, Angelique Oliger

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Central Indiana Crematory
Source Location: 3333 East Thompson Road, Indianapolis, Indiana 46229
County: Marion
SIC Code: 7261
Operation Permit No.: 097-15888-00436
Permit Reviewer: Angelique Oliger

The Office of Environmental Services (OES) has reviewed an application from Central Indiana Crematory relating to the construction and operation of the following emissions unit:

One (1) crematory, identified as emissions unit E1, with a maximum operating capacity of 150 pounds per hour (lbs/hr).

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on July 17, 2002.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	Crematory	20	2.3	8127	1600

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on July 17, 2002.

Emission Calculations

See Appendix A (one page) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	2.3
PM-10	2.3
SO ₂	0.8
VOC	1.0
CO	3.3
NO _x	1.0

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

This source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
Ozone	maintenance attainment
CO	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	2.3
PM10	2.3
SO ₂	0.8
VOC	1.0
CO	3.3
NO _x	1.0
Single HAP	negligible
Combination HAPs	negligible

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. The crematory has a charge rate of less than fifty (50) tons per day. Therefore, it is not subject to the requirements of 40 CFR Part 60 Subpart E.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source. The crematory does not combust hazardous waste as defined in 40 CFR 261. Therefore, it is not subject to the requirements of 40 CFR 63 Subpart EEE.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

This source is not subject to 326 IAC 1-6, because the source is not required to obtain a permit under 326 IAC 2.

326 IAC 2-4.1 (Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1, because it is not a major source of hazardous air pollutants, as defined in 40 CFR 63.

326 IAC 2-6 (Emission Reporting)

This source is located in Marion County and the potential to emit any regulated pollutant is less than ten (10) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 4-2-2 (Incinerators: requirements)

Pursuant to 326 IAC 4-2-2, the crematory shall:

- (a) Consist of primary and secondary chambers or the equivalent.
- (b) Be equipped with a primary burner.
- (c) Comply with 326 IAC 5-1 and 326 IAC 2.
- (d) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan approved by the Commissioner.
- (e) Not emit particulate matter in excess of five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air.
- (f) If any of the above requirements (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.
- (g) The incinerator is exempt from requirement (e) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P*, State Implementation Plan for Indiana.

Conclusion

The construction and operation of this crematory shall be exempt from air pollution control permit requirements.

Appendix A: Emission Calculations
Incinerator

Company Name: Central Indiana Crematory
Address City IN Zip: 3333 East Thompson Road, Indianapolis, Indiana 46229
Exemption: 097-15888-00436
Reviewer: Angelique Oliger
Date: 20-Feb-2003

Throughput
lbs/hr
150

Throughput
ton/yr
657

Emission Factor in lb/ton	POLLUTANT				
	PM 7.0	SO2 2.5	CO 10.0	VOC 3.0	NOX 3.0
Potential Emissions in ton/yr	2.3	0.8	3.3	1.0	1.0

Methodology

Emission factors are from AP 42 Table 2.1-12 Uncontrolled emission factors for industrial/commercial refuse combustors, other than municipal waste, multiple cl

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Emission Factor (lb/ton) * throughput(ton/yr)* 1 ton / 2000 lbs = Potential Emissions (tons/ yr)

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